# CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name: Coopers Lake Road Fuel Reduction

**Proposed** 

Implementation Date: August 2012
Proponent: August 2012
Montana DNRC

**Location:** Section 10 T 14N 11W, Sections 24 and 25 T15N R11W

County: Powell

# I. TYPE AND PURPOSE OF ACTION

The Montana DNRC is proposing to reduce fuel loading on state owned land along Coopers Lake Road (locally reffered to as the Dry Creek Road).

## II. PROJECT DEVELOPMENT

# 1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:

Provide a brief chronology of the scoping and ongoing involvement for this project. List number of individuals contacted, number of responses received, and newspapers in which notices were placed and for how long. Briefly summarize issues received from the public.

A DNRC wildlife biologist and soils scientist/hydrologist were consulted to help determine if any special circumstances existed. Adjacent landowners were contacted to receive input.

## 2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:

Examples: cost-share agreement with U.S. Forest Service, 124 Permit, 3A Authorization, Air Quality Major Open Burning Permit.

United States Fish and Wildlife Service – Conservation Easement Montana Department of Environmental Quality, burning restrictions.

# 3. ALTERNATIVE DEVELOPMENT:

Describe alternatives considered and, if applicable, provide brief description of how the alternatives were developed. List alternatives that were considered but eliminated from further analysis and why.

## Alternative A – No Action

Under this alternative no fuel reduction would occur at this time.

# Alternative B - Fuel Reduction Alternative (Action)

Fuel reduction would take place along approximately 4 miles of the Coopers Lake Road. Fuels reduction actions would take place inwards from the roadside edge up to 300 feet for a total of approximately 145 acres.

# III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.
- Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.
- Enter "NONE" If no impacts are identified or the resource is not present.

## 4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify direct, indirect, and cumulative effects to soils.

Soils in the project area are made up primarily of well drained gravelly loams on 0-50% slopes. No high erosion risk or unstable soils were identified. Some equipment operation may take place to masticate or chip slash created by the project. Equipment operation would take place only under relatively dry or frozen conditions and on slopes less than 40%. The removal of fine slash foliage and coarse woody debris could reduce the availability for nutrients to be recycled into the forest soils. However there is currently an overabundance of litter accumulation on the forest floor due to years of fire suppression. Needles would still be expected to fall from the remaining trees over the years and some large woody debris, that does not pose a fire hazard, would be left on site as mitigation. There would be some low to moderate effects on removal of fine litter and woody debris. These effects would only occur on a small strip of land adjacent to the roads and the acreage is minor on an ownership and landscape scale. There would be low to moderate direct, indirect, and low cumulative effects would be expected as a result of the proposed action alternative.

## 5. WATER QUALITY, QUANTITY AND DISTRIBUTION:

Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify direct, indirect, and cumulative effects to water resources.

Rock Creek flows on the west side of the Cooper's Lake road, and the proposed thinning operations are on the east side of the road. A class 2 stream exists within the project area. No commercial or precommercial thinning will take place under the proposed action within 100' of the class 2 stream or within the SMZ or RMZ of Rock Creek. The area of harvest is a minor strip adjacent to the road and the proposed actions would not have a measurable effect on water resources The Cooper's Lake road is open all year and is a county road, and there are possible minor dispersed sediments from the existing road, that are mianly trapped by the forest buffer along the streams. The proposed traffic during relatively dry or frozen conditions has low risk of increasing sediment on the road. No new roads or crossings are proposed. Based on implementation of BMP's and the minor scale of the project there is low risk of direct, indirect, or cumulative effects beyond baseline conditions.

# 6. AIR QUALITY:

What pollutants or particulate would be produced (i.e. particulate matter from road use or harvesting, slash pile burning, prescribed burning, etc.)? Identify the Airshed and Impact Zone (if any) according to the Montana/Idaho Airshed Group. Identify direct, indirect, and cumulative effects to air quality.

The DNRC is a member of the Montana/Idaho Airshed Group which was formed to minimize or prevent smoke impacts while using fire to accomplish land management objectives and/or fuel hazard reduction (Montana/Idaho Airshed Group 2006). The Group determines the delineation of airsheds and impact zones throughout Idaho and Montana. Airsheds describe those geographical areas that have similar atmospheric conditions, while impact zones describe any area in Montana or Idaho that the Group deems smoke sensitive and/or having an existing air quality problem (Montana/Idaho Airshed Group 2006).

The project area is in Airshed 3B, which includes all of the Blackfoot Drainage in central Powell County. The project area is located approximately 10 miles east of the town of Ovando. Year-round homes and vacation homes do exist adjacent to and within a few miles of the project area. The Bob Marshall Wilderness area is approximately 8 miles north of the project area. This wilderness area exceeds 5,000 acres and as such, is considered a Federal Class I Area that ultimately receives protection under the Federal Clean Air Act of 1977.

## Alternative A - No Action

Under the No Action Alternative, no slash piles would be burned within the project areas. Thus, there would be no effects to air quality within the local vicinity and throughout Airshed 3B.

## Alternative B - Timber Harvest (Action)

Under the Action Alternative, slash piles consisting of tree limbs and tops and other vegetative debris could be created throughout the project area. These slash piles would ultimately be burned after harvesting operations

have been completed. Burning would introduce particulate matter into the local airshed, temporarily affecting local air quality. Over 70% of emissions emitted from prescribed burning is less than 2.5 microns (National Ambient Air Quality PM 2.5). High, short-term levels of PM 2.5 may be hazardous. Within the typical column of biomass burning, the chemical toxics are: Formaldehyde, Acrolein, Acetaldehyde, 1,4 Butadiene, and Polycyclic Organic Matter.

Burning within the project area would be short in duration and would be conducted when conditions favor good to excellent ventilation and smoke dispersion as determined by the Montana Department of Environmental Quality and the Montana/Idaho Airshed Group. Prior to burning a "Prescribed Fire Burn Plan" would be done for the area. The DNRC, as a member of the Montana/Idaho Airshed Group, would burn only on approved days. Thus, direct and indirect effects to air quality due to slash pile burning associated with the proposed action would be minimal.

Burning that may occur on adjacent properties in combination with the proposed action could potentially increase cumulative effects to the local airshed and the Class I Areas. The United States Forest Service and large scale industrial forestry operations in the area participate as airshed cooperators and operate under the same Airshed Group guidelines as the DNRC. Non-industrial timberland operators are regulated by the Montana Department of Environmental Quality and burning is only allowed during seasons that provide good ventilation and smoke dispersion. Thus, cumulative effects to air quality due to slash pile burning associated with the proposed action would also be expected to be minimal.

Fuel reduction operations could create dust which may affect local air quality. Operations would be short in duration. Thus, direct, indirect, and cumulative effects to air quality due to the proposed action would be minimal.

# 7. VEGETATION COVER, QUANTITY AND QUALITY:

What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify direct, indirect, and cumulative effects to vegetation.

No sensitive plants have been identified in the project area by DNRC personnel, nor catalogued in the area by the Montana Natural Heritage Program.

The project area consists primarily of heavily stocked Douglas-fir and ponderosa pine regeneration and some scattered larger trees exist in the overstory. The proposed action would reduce stocking to achieve an average spacing of at least 10 feet between tree crowns. Leave trees would be the healthiest and best growing trees on the site, which could result in uneven spacing with some small areas completely devoid of trees and other areas maintaining tighter spacing than 10 feet between crowns. The proposed project would favor leaving seral species resulting in a shift towards the DNRC desired future condition for the project area.

Noxious weeds, mainly spotted knapweed, and spots of toadflax occur along the road. Biocontrol agents have been released on toadflax in the area. No substantial changes in weeds are expected with the proposed thinning and minor disturbance.

## 8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:

Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify direct, indirect, and cumulative effects to fish and wildlife.

**Terrestrial and Avian –** The proposed project would result in increased sight distances adjacent to open roads potentially increasing the vulnerability of some animals to hunting and poaching pressure. However, topographic screening and some vegetative cover would still remain. Due to the limited distance the proposed project would extend from an open road the project would result in a low risk of direct, indirect or cumulative effects.

**Aquatic -** Fish bearing segments of Rock Creek occur on the west side of Coopers Lake road. Some sedimentation from Coopers Lake Road into the stream is likely to occur under baseline conditions. The Cooper's Lake road is open all year and is a county road, and there are possible minor dispersed sediments from the existing road. The proposed traffic during relatively dry or frozen conditions has low risk of increasing

sediment on the road. No new roads stream crossings or harvest in the SMZ or RMZ of any streams are proposed. Based on implementation of BMP's, no operations near streams and the minor scale of the project there is low risk of direct, indirect, or cumulative effects to sediment or fish habitat.

# 9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:

Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify direct, indirect, and cumulative effects to these species and their habitat.

The following species were considered but eliminated from detailed study due to lack of habitat present: Bald Eagle, Fisher, Peregrine Falcon, Black-backed Woodpecker, elk winter range, Common Loon, Harlequin Duck, Townsend's Big-eared Bat, Coeur d'Alene Salamander, Northern Bog Lemming, Mountain Plover, and Columbian Sharp-tailed Grouse.

**Grizzly Bear**— The affected parcels are located in occupied grizzly bear habitat, and approximately 1 mile west of the Northern Continental Divide Ecosystem grizzly bear recovery area. The proposed action would reduce vegetative screening along an open road. However topographic screening exists within 200 feet along the open road, and remaining tree crowns and boles would provide some vegetative screening cover. Additional mitigations would include requiring operators to store food and other attractants in a bear resistant manner. Thus the proposed action would likely result in a low risk of direct, indirect, or cumulative effects to grizzly bears

**Gray Wolf**—The affected parcel is located adjacent to the annual home range for the Arrastra Creek wolf pack; additionally, the Ovando Mountain wolf pack annual home range is roughly 3 miles from the project area, thus there is a good chance that wolves are using the project area. Although the proposed action would reduce visual screening cover along open roads, some topographic and vegetative screening would remain. Thus a low risk of direct, indirect, or cumulative effects to wolves as a result of the proposed action. However, should a wolf den or rendezvous site occur within 1 mile of the affected parcel, a DNRC wildlife biologist would be consulted to develop further mitigation measures (as per ARM 36.11.430).

**Lynx**—Limited habitats exist on DNRC parcels in the vicinity, and no habitats exist in the portion of the project area proposed for treatment. As a result, there would likely be a low risk of direct, indirect, or cumulative effects to lynx from the proposed action.

**Pileated Woodpecker**—The proposed project area contains some pileated woodpecker habitats. Proposed thinning could slightly reduce overall suitability of this area for pileated woodpeckers. However, given the size of the area, habitats present, and limited scope of potential changes, a low risk of direct, indirect or cumulative effects to pileated woodpeckers would be anticipated.

**Flammulated Owl**—The proposed project area contains some flammulated owl habitats. Proposed thinning could potentially improve suitability of this area for flammulated owls. However, given the size of the area, habitats present, and limited scope of potential changes, a low risk of direct, indirect or cumulative effects to flammulated owls would be anticipated.

**Fisheries**—Fish bearing segments of Rock Creek occur on the west side of Coopers Lake road. Westslope cutthroat trout (a sensitive species) occurs in segment of Rock Creek that are adjacent to the Cooper's Lake road. Refer to the aquatic life and fishery discussion in section 8. Based on implementation of BMP's, no operations near streams and the minor scale of the project there is low risk of direct, indirect, or cumulative effects to sediment or fish habitat.

## 10. HISTORICAL AND ARCHAEOLOGICAL SITES:

Identify and determine direct, indirect, and cumulative effects to historical, archaeological or paleontological resources.

None.

### 11. AESTHETICS:

Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify direct, indirect, and cumulative effects to aesthetics.

The proposed project area is adjacent to open roads that are used by area landowners and recreationists. It is not visible from any major highways or population centers. Much of the traffic that drives through the area is accessing National Forest land including Coopers Lake, the Bob Marshall Wilderness Area, and Huckleberry Pass. The area is also used by walk-in recreationists for activities such as hunting.

Currently people cannot see through the dense stand of regeneration. The proposed project would create a more open stand that people could see through. The potential effects of each alternative would be perceived differently by different people, but overall it could be said that the Action Alternative would likely result in a low risk of direct, indirect, or cumulative effects, beyond what is expected under the No Action Alternative.

# 12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:

Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify direct, indirect, and cumulative effects to environmental resources.

No negative direct, indirect or cumulative effects are expected to occur as a result of the proposed project.

## 13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:

List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.

No negative direct, indirect or cumulative effects are expected to occur as a result of the proposed project.

## IV. IMPACTS ON THE HUMAN POPULATION

- RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.
- Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.
- Enter "NONE" If no impacts are identified or the resource is not present.

## 14. HUMAN HEALTH AND SAFETY:

Identify any health and safety risks posed by the project.

No direct effects to human health and safety would be expected as result of the proposed action.

There would be no direct effects to human health by the proposed project. Safety considerations and temporary risks would increase for the professional contractors working within the project area. There are no unusual safety considerations with the proposed project. The general public and local residents would not face increased health or long term safety hazards because of the proposed project.

Indirectly the proposed fuels reduction would reduce the likelihood of a wildland fire ignition exceeding the initial attack capabilities of local fire fighting resources. Additionally it would increase the effectiveness of firefighting resources using Coopers Lake Road as a fuel break to stop a fire moving from the grasslands on Kleinschmidt Flat into the forested land to the west of Coopers Lake Road. The project would also provide the same increased capability of stopping a fire moving from the forested areas into the grasslands and possibly threatening homes and other structures.

No negative cumulative effects are expected to occur as a result of this project.

## 15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:

Identify how the project would add to or alter these activities.

No negative direct, indirect or cumulative effects are expected to occur as a result of the proposed project.

## 16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:

Estimate the number of jobs the project would create, move or eliminate. Identify direct, indirect, and cumulative effects to the employment market.

A few short-term jobs in the local area may be created for the duration of the proposed action.

#### 17. LOCAL AND STATE TAX BASE AND TAX REVENUES:

Estimate tax revenue the project would create or eliminate. Identify direct, indirect, and cumulative effects to taxes and revenue.

The proposed action has only indirect, limited implications for tax collection.

# 18. DEMAND FOR GOVERNMENT SERVICES:

Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify direct, indirect, and cumulative effects of this and other projects on government services

Aside from contract administration there would be minimal impacts related to demand for government services due to the relatively small size of the project.

## 19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:

List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.

The State Forest Land Management Plan (SFLMP) is the plan under which DNRC manages forested state trust lands. DNRC developed the SFLMP in 1996 to provide field personnel with consistent policy and direction for the management of forested state trust lands. The SFLMP provides the philosophical basis, technical rationale, and direction for DNRC's forest management program. The SFLMP is premised on the philosophy that the best way to produce long-term income for the trust is to manage intensively for healthy and biologically diverse forests. In the foreseeable future, timber management will continue to be the primary source of revenue and primary tool for achieving biodiversity objectives on forested state trust lands.

The DNRC Administrative Rules for Forest Management (*ARM 36.11.401 through 456*) are the specific legal resource management standards and measures under which DNRC implements the SFLMP and subsequently its forest management program. The Rules were adopted in March 2003 and provide the legal framework for DNRC project-level decisions and provide field personnel with consistent policy and direction for managing forested state trust lands. All forest management projects administered by DNRC on forested state trust lands must comply with the Rules.

## 20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:

Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify direct, indirect, and cumulative effects to recreational and wilderness activities.

The proposed project area is used by the public primarily for hunting and dispersed recreation. The open roads that go through the project area are used primarily by people accessing Trust Land and National Forest Land, including the Bob Marshall Wilderness Area, which is approximately 8 miles north.

No direct, indirect, or cumulative effects would be expected as a result of the proposed fuels reduction project.

#### 21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:

Estimate population changes and additional housing the project would require. Identify direct, indirect, and cumulative effects to population and housing.

There would be no measurable direct, indirect, or cumulative effects related to population and housing as a result of the proposed action.

## 22. SOCIAL STRUCTURES AND MORES:

Identify potential disruption of native or traditional lifestyles or communities.

No negative direct, indirect, or cumulative effects would be expected under either alternative.

# 23. CULTURAL UNIQUENESS AND DIVERSITY:

How would the action affect any unique quality of the area?

No negative direct, indirect, or cumulative effects would be expected under either alternative.

## 24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:

Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify direct, indirect, and cumulative economic and social effects likely to occur as a result of the proposed action.

The proposed project is being developed in conjunction with the Blackfoot Challenge and it is likely it will qualify for a 50 percent match in funds from the Blackfoot Challenge Hazardous Fuels Program, Community Protection Program Urban Interface Grant. Under this program the DNRC would be responsible for paying half of the cost of the project and the grant would fund the other half. The estimated cost of the project is \$87,000.00 (145 acres X \$600.00/acre). Half of this cost would be paid by DNRC Forest Improvement monies that are generated through timber sales. The other half would be paid by the grant.

EA Checklist Name: Neil Simpson Date: 06/26/2012

Prepared By: Title: Management Forester

V. FINDING	
25. ALTERNATIVE SELECTED:	
Alternative B Fuel Reduction Alternative. The Action Alternative will promote tree growth on DNRC managed lands, perform pre-commercial thinning to increase growth in natural stands, decrease the fuel hazard adjacent to area roads, and fulfills our responsibility to manage trust lands over the long-term.	
26. SIGNIFICANCE OF POTENTIAL IMPACTS:	
NONE	
27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:	
EIS	More Detailed EA X No Further Analysis
EA Checklist Approved By:	Name: Craig V. Nelson
	Title: Supervisor Forester, Clearwater Unit
Signature:/s/ Craig	V. Nelson Date:June 28, 2012